

# **Installing MacBook Core Duo LCD Panel**

#### Tools used in this guide

- <u>Coin</u> (1)
- Phillips #00 Screwdriver (1)
- Spudger (1)

#### Parts relevant to this guide

- MacBook 13.3" LCD Panel (1)
- MacBook 13.3" Core Duo LCD Assembly (1)

The LCD screen without the inverter, cables, or bezels.



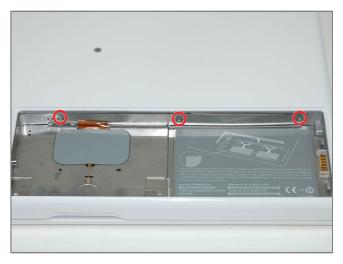
# Step 1 - Battery

• Use a coin to rotate the battery-locking screw 90 degrees clockwise.



### Step 2

• Lift the battery out of the computer.



# Step 3 - Memory Cover

- Remove the three evenly-spaced Phillips screws from along the rear wall of the battery compartment.
- The screws are captive to the metal memory cover.





• Lift up on L-shaped memory cover, slide it to the right, and lift it out of the computer.



### Step 5 - Upper Case

- Remove the following 3 screws:
  - One 11 mm Phillips #00 in the middle of the case.
  - Two 14.5 mm Phillips #00.
- If the screws stick in the case, you can use a magnetized screwdriver to draw them out.



 The shorter of the three screws goes in the middle.



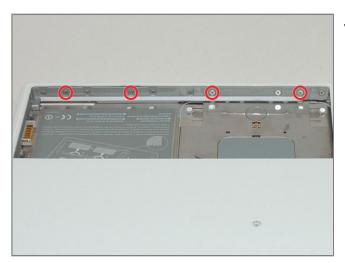


- Remove the following 3 screws from the rear wall of the battery compartment:
  - Two 3 mm Phillips #000.
  - One 4 mm Phillips #000 on the right side.
- When reinstalling these screws, it may be helpful to push down on the lower case to line up the screw holes.





 Remove the two Phillips #00 screws from either side of the right wall of the battery compartment (not the ones closest to the battery connector).



#### Step 8

 Remove the four indicated Phillips #00 screws from the front wall of the battery compartment. When working from the left, remove the 2nd, 4th, 7th and 9th screw.



- Remove the following 4 screws from the back of the computer:
  - Two 7 mm Philips on the far sides.
  - Two 10.5 mm Phillips toward the center.



- Remove the two Phillips #00 screws from the optical side of the computer.
- It is not necessary to remove the similar screws on the other side of the computer.





#### Step 11

- Starting near the display and working around to the front of the computer, pry up on the upper case. It is held with clips on the right above the optical drive. These will release with some firm lifting pressure.
- There's a trackpad and keyboard ribbon connecting the upper case to the logic board, so don't pull the upper case off entirely just yet.





# Step 12

 While holding up the upper case, use a spudger to pry up the orange trackpad and keyboard cable from its connector.



### Step 13 - Optical Drive

 Grasp the white plastic tab attached to the hard drive and pull it to the left, removing the hard drive from the computer.



### Step 14

 Remove the two Phillips screws from the front edge of the optical drive.



# Step 15

• Disconnect the orange optical drive ribbon cable from the logic board.



 Disconnect the newly-revealed display data cable. If there is no pull-tab on the top of the connector, it may be helpful to use a spudger to disconnect this connector.



#### Step 17

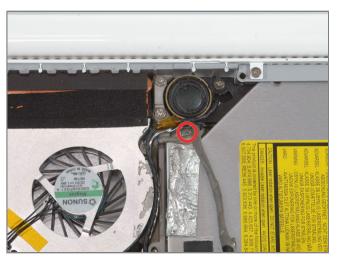
 Disconnect the (once again) newly-revealed hard drive cable.



- Peel up the foil tape between the fan and the optical drive.
- Remove the Phillips screw securing the display data cable to the metal framework.



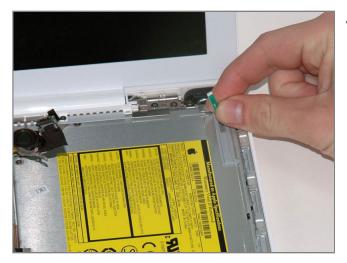
• Pull up the display data cable from along the edge of the optical drive to reveal a silver Phillips screw.



# Step 20

- Remove the Phillips screw securing the optical drive.
- The Bluetooth cable may be covering the screw; carefully push it aside before removing the screw.





# Step 21

• Lift the Bluetooth antenna board from the right side of the optical drive.

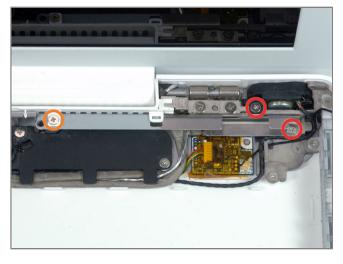


 Deroute the hard drive cable from along the front of the optical drive.



#### Step 23

• Lift the front edge of the optical drive and slide it up and out of the computer.



# Step 24 - C-Channel

- Remove the following 3 screws:
  - Two 3 mm Phillips near the right speaker.
  - One 6 mm Phillips threaded through a hole in a plastic finger above the subwoofer.
- Be careful not to over-tighten the screw above the subwoofer too tight or the plastic could crack.



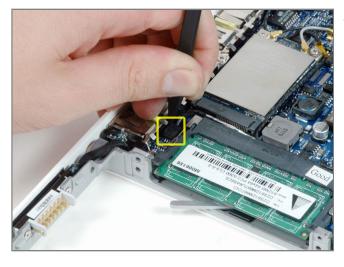


 Lift the right speaker out of its housing and set it to the side.



# Step 26

 Using a spudger, gently pry up the white plastic slot and slide the metal c-channel to the right and away from the display.



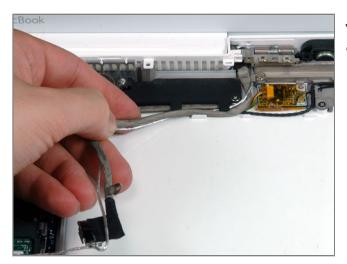
# Step 27 - Display

- Use a spudger to carefully disconnect the microphone cable from the logic board. You'll want to work from side to side, and slowly wiggle the connector out of its socket.
- Pulling on this connector vertically will break the socket off the logic board. This connector should be removed horizontally by gently pulling the microphone cable toward the screen while working a spudger between the connector and the socket.





• Lift up on the black right speaker cable with one hand, and deroute the silver microphone cable from the silver metal clip just above the right RAM slot.



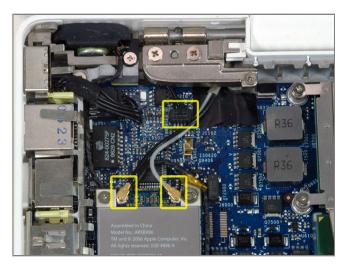
### Step 29

• Deroute the silver microphone cable and gray display data cable from the tabs at the bottom of the subwoofer.



# Step 30

 Remove the single Phillips screw securing the ground loop in the display data cable located just above the Bluetooth board.

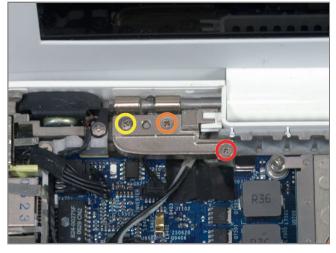


 Disconnect the two antenna cables from the Airport card, and the black inverter cable from the logic board. (Pull vertically on all three.)



# Step 32

- Remove the following 2 screws from the right hinge mount:
  - One 6 mm Phillips on the left side of the hinge mount.
  - One 10 mm Phillips on the right side of the hinge mount.
- Lift the right hinge mount out of the computer.



- Hold the display with one hand while removing the screws from the left hinge mount.
- Remove the following 3 screws from the left hinge mount:
  - One 6 mm smaller diameter Phillips from the right side.
  - One 6 mm larger diameter Phillips from the middle.
  - One 10 mm Phillips from the left side.
- Lift the left hinge mount out of the computer.



• Grasp the display assembly on either side, and lift it up and out of the computer.



#### Step 35 - Front Bezel

• The display assembly. The following steps should be identical for both white and black MacBooks.



- Use a thin plastic card to release the tabs holding the front display bezel to the display assembly. There are five tabs along the left side of the display bezel.
- Don't use a card that cannot be replaced if damaged. The clips can be difficult to remove and the card can bend and break, rendering it useless.





 Continue to free the tabs along the the top edge of the display assembly. Be careful when working near the iSight camera.



#### Step 38

 Next, free the five tabs securing the display bezel on the right side.



# Step 39

- Lift up the front display bezel from the top and use your plastic card to free the tabs along the bottom edge of the display bezel.
- Make sure that your card is between the metal frame around the LCD panel and the display bezel and not touching the LCD panel itself.



 After freeing all holding tabs, lift the front display bezel away from the display assembly.



#### Step 40 - Clutch Cover

• Remove the three silver Phillips screws securing the clutch cover.



### Step 41

 Insert a spudger into the crack between the clutch cover and the rear bezel, and carefully pry up the clutch cover. It may also be helpful to gently wiggle the clutch cover with your other hand.



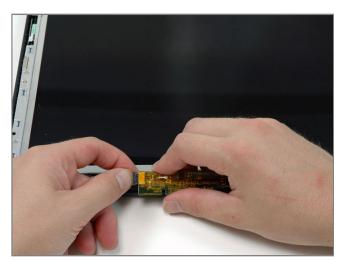
# Step 42

 Lift up the left side of the clutch cover and guide the Bluetooth and Airport antenna cables through the gap in the clutch cover.



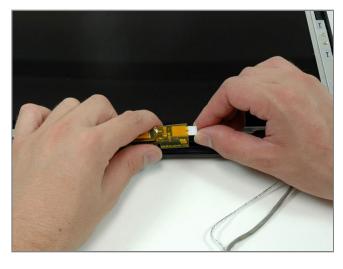
- Lift up the right side of the clutch cover and guide the display data and iSight cables through the gap in the clutch cover.
- Lift the clutch cover out of the display assembly.
- Make sure not to pinch the pink and white inverter cable when snapping the clutch cover back into place.





#### Step 44 - Inverter

 Lift the newly-revealed inverter board out of its housing and disconnect the black inverter cable from the left end of the board.



# Step 45

• Disconnect the white inverter cable from the right end of the inverter board.

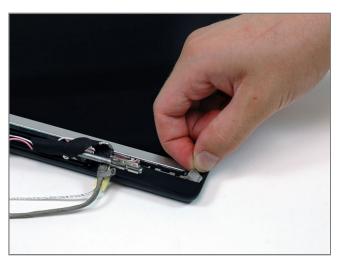


#### Step 46 - LCD Panel

- Use a spudger to slide the left bezel cover towards the LCD panel.
  - Do not lift up vertically on the cover!
     Unlike the large display bezel, this one has horizontal hooks to keep it in place. These will break easily.



• Lift the left bezel cover off the display assembly.

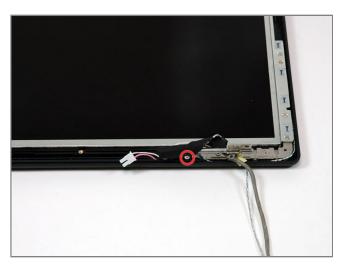


#### Step 47

 Lift the translucent spacer located above the right bezel cover out of the display assembly.



- Use a spudger to slide the right bezel cover toward the LCD panel.
- Lift the right bezel cover off the display assembly.



- Remove the Phillips screw securing the display data cable to the right hinge.
- Do the same for the inverter cable on the left hinge, if applicable.



#### Step 50

 Remove the 12 identical Phillips screws securing the LCD panel assembly to the rear bezel.

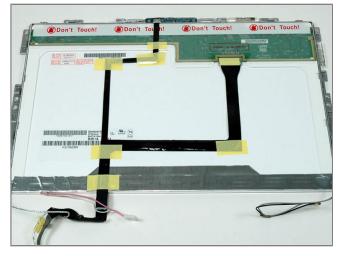


- Begin to lift the LCD panel assembly out of the computer by lifting up near the top of the display.
- Be careful to only hold the LCD panel by the silver metal brackets that surround it.





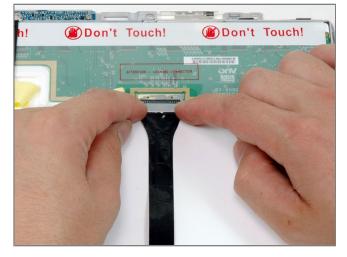
- Thread the display data and iSight cable around the right hinge.
- Lift the display assembly and its attached cables out of the rear bezel.



#### Step 53

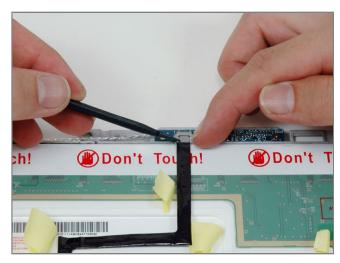
- Turn the LCD panel assembly over so that the screen is face down. You may want to use a cloth on your worksurface to prevent scratching the screen.
- Peel up the yellow tape securing the display data and iSight cables to the back of the LCD panel.
- You'll need to transfer the tape over to your new display when reassembling the computer.



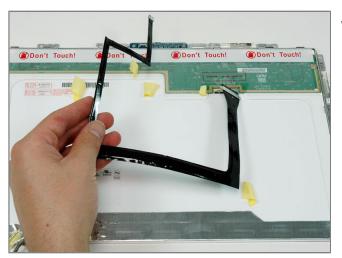


# Step 54

 Disconnect the black display data cable from the back of the display.



• Disconnect the iSight cable from the top of the display.



#### Step 56

• Lift up the display data and iSight cables and move them to the side. It is not necessary to entirely remove these cables from the display assembly.



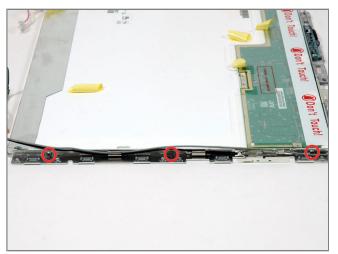
# Step 57

• Remove the three silver Phillips screws along the left edge of the display.



- Remove the two silver Phillips screws securing the iSight holder to the top of the display.
- Make sure to remove the screws securing the metal bracket to the edge of the display and not the screws in the iSight board itself.





#### Step 59

 Remove the three silver Phillips screws along the right edge of the display.



# Step 60

• Lift up the LCD panel by the front edge and slide it out of the metal mounting brackets.

To reassemble your device, follow these instructions in reverse order.

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